

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for slip control of a clutch situated between an engine and a transmission of a motor vehicle, the method comprising:

generating a position setpoint signal as a function of a differential speed between a clutch input speed and a clutch output speed;

regulating the clutch using the position setpoint signal; ~~via a differential speed between a clutch input speed and a clutch output speed, the differential speed being a control variable for modulating a clutch torque;~~ and

using an engine torque as a control variable for the clutch instead of or in addition to the position setpoint signal ~~clutch torque modulated by the first control variable.~~

Claim 2 (original): The method as recited in claim 1 wherein an instantaneous engine torque desired by a driver is determined from a position of the accelerator pedal and an instantaneous operating state of the engine so as to define a desired torque, and the desired torque is used as the control variable for the clutch to regulate clutch slip so that the transmissible clutch torque is adjusted to the desired torque and modulated accordingly.

Claim 3 (original): The method as recited in claim 2 further comprising filtering the control variable for the transmissible clutch torque from sudden torque changes, low-frequency vibrations, and minor changes in the desired torque unintended by the driver.

Claim 4 (original): The method as recited in claim 2 wherein the instantaneous engine torque is regulated so that the clutch slip corresponding to the instantaneous operating state of the engine is set at the clutch, the clutch slip being kept constant.

Claim 5 (original): The method as recited in claim 4 wherein the actual engine torque is modulated to minimize exhaust gas emissions in the event of engine speed fluctuations less than/equal to a predefined speed threshold.

Claim 6 (original): The method as recited in claim 5 wherein the threshold is 100 rpm.

Claim 7 (original): The method as recited in claim 1 wherein the transmissible clutch torque is reduced by an adjustable fixed amount or by an adjustable factor with respect to a torque desired by the driver in an instantaneous operating state of the engine.

Claim 8 (original): The method as recited in claim 7 wherein the fixed amount for reduction in the clutch torque with respect to the desired torque is 10 to 15 Nm.

Claim 9 (original): The method as recited in claim 7 wherein the factor for reducing the clutch torque with respect to the torque desired by the driver is 0.93 to 0.96.

Claim 10 (original): The method as recited in claim 1 wherein the engine torque is reduced via rapid short-term modification of an ignition angle, and a slip speed of the clutch is thus regulated to reduce the transmitted clutch torque.

Claim 11 (new): A method for slip control of a clutch situated between an engine and a transmission of a motor vehicle, the method comprising:

regulating the clutch via a differential speed between a clutch input speed and a clutch output speed, the differential speed being a control variable for modulating a clutch torque; and

using an engine torque as a control variable for the clutch instead of or in addition to the clutch torque modulated by the first control variable;

wherein an instantaneous engine torque desired by a driver is determined from a position of the accelerator pedal and an instantaneous operating state of the engine so as to define a desired torque, and the desired torque is used as the control variable for the clutch to regulate clutch slip so that the transmissible clutch torque is adjusted to the desired torque and modulated accordingly;

wherein the instantaneous engine torque is regulated so that the clutch slip corresponding to the instantaneous operating state of the engine is set at the clutch, the clutch slip being kept constant.

Claim 12 (new): The method as recited in claim 11 wherein the actual engine torque is modulated to minimize exhaust gas emissions in the event of engine speed fluctuations less than/equal to a predefined speed threshold.

Claim 13 (new): The method as recited in claim 12 wherein the threshold is 100 rpm.

Claim 14 (new): A method for slip control of a clutch situated between an engine and a transmission of a motor vehicle, the method comprising:

regulating the clutch via a differential speed between a clutch input speed and a clutch output speed, the differential speed being a control variable for modulating a clutch torque; and

using an engine torque as a control variable for the clutch instead of or in addition to the clutch torque modulated by the first control variable;

wherein the transmissible clutch torque is reduced by an adjustable fixed amount or by an adjustable factor with respect to a torque desired by the driver in an instantaneous operating state of the engine.

Claim 15 (new): The method as recited in claim 14 wherein the fixed amount for reduction in the clutch torque with respect to the desired torque is 10 to 15 Nm.

Claim 16 (new): The method as recited in claim 14 wherein the factor for reducing the clutch torque with respect to the torque desired by the driver is 0.93 to 0.96.

Claim 17 (new): A method for slip control of a clutch situated between an engine and a transmission of a motor vehicle, the method comprising:

regulating the clutch via a differential speed between a clutch input speed and a clutch output speed, the differential speed being a control variable for modulating a clutch torque; and

using an engine torque as a control variable for the clutch instead of or in addition to the clutch torque modulated by the first control variable;

wherein the engine torque is reduced via rapid short-term modification of an ignition angle, and a slip speed of the clutch is thus regulated to reduce the transmitted clutch torque.